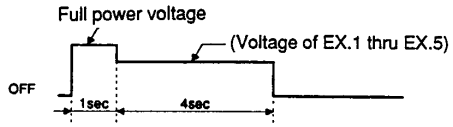
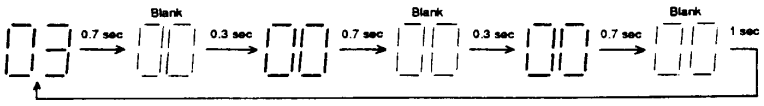
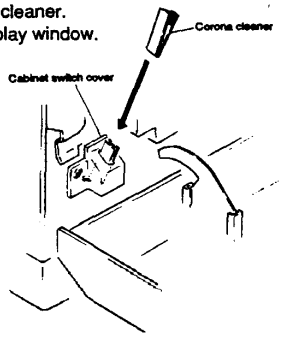
List of test commands SF-7370/7320

No.	Description	Note
1	Checking mirror base movement	Full scan, including test command 2
2	Displaying optical system sensor status (MHPS, MORS, LPS)	
3	Displaying paper sensor status (PID, PPD, POD)	
4	Displaying cassette (CD) and waste toner (TFD) status	
5	Checking operation panel displays	5 seconds
6	Checking heater lamp	5 times of on/off actions.
7	Checking copy lamp	5 seconds
8	Checking developing bias voltage.	30 seconds
9	Checking high voltages (MHV, THV, GRID)	30 seconds
12	Checking discharge lamp and side lamp	30 seconds
13	Cancelling U1 trouble status	
14	Cancelling trouble status other than U1 and U2	
16	Displaying preset maintenance counter	
18	Displaying total copy counter	
19	Displaying maintenance counter	
20	Clearing maintenance counter	
21	Copy aging test	Displaying warmup time
22	Misfeed-free aging test	Displaying aging test (valid only for export version)
23	Fuser idle (heater lamp off), misfeed-free aging test	(Valid only for export version)
24	Disabling warmup function	
25	Checking automatic developer function and checking rotating parts	
26	Checking variable magnification movements (No.4/5 mirror)	(SF-7370 only)
27	Variable magnification aging test (No.4/5 mirror)	(SF-7370 only)
40	Displaying preset developer counter	
41	Displaying developer counter	
42	Clearing developer counter	
46	Adjusting exposure level	
47	Measuring AE sensor characteristics	
48	Adjusting magnification ratio (longitudinal or front and rear frame direction)	(SF-7370 only)
49	Adjusting magnification ratio (transversal or paper transport direction)	(SF-7370 only)
50	Adjusting copy lead edge image	
51	Programming AE again	
58	Adjusting lead edge void area	
72	Programming copy kit	
79	Model and destination setting	
90	Programming reverse rotation time	
91	Programming warmup time	
93	Displaying AE sensor data	
96	Programming fuser temperature	
97	Programming manual feed copy mode	
98	Programming fuser temperature (power save mode)	

Types of test commands and their functions

Test command	Function
01	The mirror base will perform forward and reverse movements automatically, to check the mirror base action. At the same time, action of the sensors (MHPS, MORS) can also be checked. With the SF-7370 the mirror base may be moved forward in the speed of desired magnification ratio in this test command, when the magnification ratio is chosen before depressing the PSW. • ON when the mirror home position sensor (MHPS) is active. • ON when the mirror overrun sensor (MORS) is active. • ON when the lens home position sensor (LPS) is active
02	The mirror base can be moved manually to check activation of the sensor (MHPS, MORS) on the display. The procedure is identical to the test command 1.
03	On/off action of sensor switches (PPD, POD, PID) can be checked on the display. The indicator turns ON when the respective switch is active. • POD (Paper exit detector) • PID (Manual feed paper entry detector) • PPD (Paper pass detector)
04	On/off action of the full waste toner box sensor (TFD) and cassette detector can be checked on the display. The indicator turns ON when the respective switch is active. • CD (Cassette detector) • TFD (Toner full detector)
05	All indicators on the operation panel are turned on for a period of 5 seconds to check for a lamp failure or a related circuit.
06	The heater lamp is turned on and off five times for a period of 0.5 second. Heater lamp turned on for 0.5 second → Heater lamp turned off for 0.5 second Used to check the heater lamp drive circuit. If the heater lamp flashes during the above cycle with the status "H2" or "H4" on display, the failure is in the LSI input line, not the output lines. (Probably thermistor or LSI failure). If the lamps stay ON or OFF continuously, there may be a failure in the triac, heater lamp, or the LSI output lines.
07	The copy lamp is turned on for 5 seconds. During the first one second, a full power voltage is added, then the voltage appropriate to the exposure setting will be added. IMPORTANT: This test command must be executed with the original cover open, in order to prevent continuing exposure of the copy lamp light over the photoconductor drum. Neither, continuing execution of this test command must be avoided. 
08	Developing bias is turned on for 30 seconds. The bias voltage and main PWB line signal checks may be made with this test command.
09	MHV, THV, GRID are turned on for 30 seconds. When a number 1 thru 3 is entered after the test command has started, the grid voltage can be changed. 1 ... 0 (V) 2 ... 750 (V) 3 ... –590 (V)
12	The side blank lamps (SL) and the discharge lamp (DL) turn on for a period of 30 seconds. After the execution of this test command, each side blank lamp turns on alternately from the front frame side (LD401) to the rear frame side (LD410).
13	Used to cancel the status code U1.
14	Used to cancel the status code H3.
16	Used to check the maintenance preset counter contents. Set to 30,000 and its contents will be displayed on the multicopy number display in three cycles to indicate a whole number, two digits at a time. 
18	Used to check the machine's total copy count. Will be displayed in the same manner as (16) above.
19	Actual copy count in the maintenance counter is displayed. Will be displayed in the same manner as (16) above.

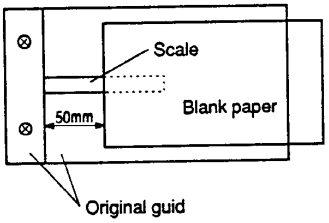
<table>
<tr><th>Test command</th><th>Function</th></tr>
<tr><td>20</td><td>Used to reset the maintenance counter to zero after the completion of machine maintenance.
This test command must be executed after completion of machine maintenance.</td></tr>
<tr><td>21</td><td>1. Used to check the warm-up time.
2. Used to perform the aging test according to the entered copy number.
When the test command is entered, the machine goes into the ordinary machine operating mode, and the warmup time starts to count from 0, and increases every 1 second. The warmup time is indicated on the multicopy number display.
When the RPL turns on, warmup counting is stopped and the display remains as it is. Depression of the CLEAR key, entry of a copy number, and depression of the PSW begins the aging operation until the entered copy number is reached.
The paper misfeed detect function stays active.</td></tr>
<tr><td>22</td><td>Aging test is carried out without using paper.
It would be possible to do the aging test disabling the misfeed detect function.
(Looks similar to the test command 21 and the same applied to the warmup time checking as the test command 21.</td></tr>
<tr><td>23</td><td>Aging test is carried out without using paper.
It would be possible to do the aging test disabling the warmup time, heater system trouble function, and paper misfeed function.
(Looks similar to the test command 21 but the heater lamp (HL) will not be turned on).</td></tr>
<tr><td>24</td><td>Permits machine operational checks by omitting the warmup time.
RPL lights up immediately upon completion of the initial operation after the execution of the test command. It is possible to immediately proceed to check machine operations.</td></tr>
<tr><td>25</td><td>1. Used to check the operating status of the toner sensor (TCS) motor and rotating parts.
[CLEAR] → [0/0] → [0/0] → [CLEAR] → [2] → [5] → [PSW]
([C]) ([C])
2. Used to do the automatic developer adjustment (toner concentration).
(Automatic developer adjusting method)
① Make sure that the DV unit is not loaded in the copier.
NOTE: If a lower toner is met when the main motor starts to rotate after power on, the toner is started to supply. If the DV unit not adjusted was inserted and the power is turned on with toner present in the toner hopper, it affects the toner concentration. It is mandatory to follow the direction given next before adjusting the TCS for new developer.
② Turn power on.
③ Actuate the doorswitch using the corona cleaner.
Status "CH" will come flashing in the display window.
 

④ Execute test command 25. Do not push the print switch.
[CLEAR] → [0/0] → [0/0] → [CLEAR] → [2] → [5] → (CSK) → [PSW]
([C]) ([C]) (With this, the cassette lamp comes active.)
⑤ Insert the DV unit in the copier.
⑥ Press the print switch.
With this, the test command is executed and the developer will be stirred for a period of three minutes. After it was stirred for three minutes, the toner concentration in the developer is interrogated by the main PWB. While the developer is being stirred, the toner sensor input value of 1 thru 99 is displayed. If the value is smaller than "1" or larger than "99", "EU" will be displayed.
The color of the DV unit inserted will be displayed in the following manner:
<table><tr><th></th><th>Black</th><th>Red</th><th>Blue</th><th>Brown</th><th>Green</th></tr><tr><td>Human sensor</td><td>○</td><td>×</td><td>○</td><td>×</td><td>○</td></tr><tr><td>Light sensor</td><td>×</td><td>○</td><td>○</td><td>×</td><td>×</td></tr><tr><td>Humidity sensor</td><td>×</td><td>×</td><td>×</td><td>○</td><td>○</td></tr></table>○: ON ×: OFF
NOTE: If the test command was terminated in a middle of its operation, the toner concentration may not be recognized.</td></tr>
</table>

<table>
<tr><th>Test command</th><th>Function</th></tr>
<tr><td>26
(SF-7370 only)</td><td>The lens moves from normal → 100% → 80% → 70% → 122% → 100% (AB series)
The lens moves from normal → 100% → 75% → 64% → 124% → 100 (Inch series)
The lens stops for 0.5 second at each position.
Used to check lens base operation.</td></tr>
<tr><td>27
(SF-7370 only)</td><td>(AB series)
Normal → x0.80 → x0.70 → x1.22
(Inch series)
Normal → x0.75 → x0.64 → x1.24
Lens stops through the ratios continuously.
The lens stops for 0.5 second at each position.
Used to aging the lens base operation.</td></tr>
<tr><td>40</td><td>Displays the contents of the developer preset counter of the developer unit in use, in a similar manner as test command 16.
Similar to test command 25 for displaying of the color of the developer unit.</td></tr>
<tr><td>41</td><td>Displays the contents of the developer counter of the developer unit in use, in a similar manner as the test command 25.
Similar to test command 25 for displaying of the color of the developer unit.</td></tr>
<tr><td>42</td><td>Resets the contents of the developer counter, in a similar manner as test command 16.
This test command must be executed upon replacement of the developer.
Similar to test command 25 for displaying of the color of the developer unit.</td></tr>
<tr><td>46</td><td>Test command for exposure adjustment
Adjustments are done in each mode of manual, photo, and AE (CPC).
There are eight kinds of data that can be programmed by the test command, and data are entered on the numeric keypad.
The exposure select key is used to change the exposure mode which can be done by the dark and light key.
<table>
<tr><th>Exposure mode</th><th>Lamp state</th><th>EX.1</th><th>EX.5</th></tr>
<tr><td>Manual</td><td>MEL ON</td><td>MEMAX</td><td>MEMIN</td></tr>
<tr><td>Photo</td><td>PEL ON</td><td>PEMAX</td><td>PEMIN</td></tr>
<tr><td>AE</td><td>AEL ON</td><td>KP</td><td>AEMIN</td></tr>
<tr><td>AE(CPC)</td><td>AEL, PEL ON</td><td>KP, CPC</td><td>AEMIN.CPC</td></tr>
</table>
MEMAX : Manual exposure upper limit
MEMIN : Manual exposure lower limit
PEMAX : Photo exposure upper limit
PEMIN : Photo exposure lower limit
AEMIN : AE exposure lower limit (exposure level for a blank original)
KP : AE exposure deviation
AEMIN.CPC : AE, CPC mode exposure lower limit (exposure level for a blank original)
KP.CPC : AE, CPC mode exposure deviation
(Adjusting method)
① Execute test command 46.
[CLEAR] → [0/◊] → [0/◊] → [CLEAR] → [4] → [6] → [PSW]
([C]) ([C])
At the same moment the machine starts to warm up, the value presently programmed (MEMAX) is displayed. The ready lamp turned on after the warmup has completed and it will become ready to make copy or to program.
② Enter a number for an optimum result and do the adjustment. As the exposure select key is pressed, the mode changes in order of:
ManualPhotoAEAE(CPC mode)Manual
Press the dark key to change from EX.1 to EX.5.
Press the light key to change from EX.5 to EX.1.
Use a number between 0 and 90.
Press the print switch after the number has entered, then a copy in that mode will be produced.
③ Terminate the test command 46.
Press the clear key.</td></tr>
<tr><td>47</td><td>AE sensor pot adjustment and AE sensor output characteristic measuring test command
(Adjusting method)
① Place four to five sheets of blank paper over the original table.
② Execute test command.
[CLEAR] → [0/◊] → [0/◊] → [CLEAR] → [4] → [7] → [PSW]
([C]) ([C])
The mirror base starts to scan and stops at the AE sensor measuring position, and the RPL comes active. At the same moment, the value of the previously measured AE sensor will be displayed in a hexadecimal number.
③ Press the print switch after the ready lamp has turned on.
The copy lamp will come active and the input value of the present AE sensor will be displayed.</td></tr>
</table>

Test command	Function
	④ Adjust the AE sensor adjusting pot on the main PWB. After the copy lamp has turned on, adjust the input value between E0H and F0H using the AE sensor adjusting pot. Clockwise turn of the pot increases the input number and vise versa. When the input value is within the limits, the cassette lamp will come active. After the AE sensor adjustment has completed, press the print switch to change to the AE sensor output characteristics measuring mode. If the print switch was not pressed within ten minutes after the copy lamp has turned on, it will automatically change to the AE sensor output characteristics measuring mode. In the AE sensor output characteristics measuring mode, the copy lamp drive voltage automatically shifts and the AE sensor output characteristics of that time is automatically measured and stored in the memory. If the adjustment was not finished within ten seconds, press the print switch once again after the ready lamp turned on and make adjustment. ⑤ Terminate the test command 47. CLEAR key (twice)
48 (SF-7370 only)	Vertical (towards front and rear frame sides) magnification ratio adjusting test command The magnification ratio towards the vertical copy direction (front frame and rear frame) can be adjusted by varying the lens stop position. (SF-7370 only) (Adjusting method) ① Place the scale on the original table along the front and rear frame sides. ② Execute test command 48. [CLEAR] → [0/0] → [0/0] → [CLEAR] → [4] → [8] → [PSW] ([C]) ([C]) At the same moment the machine starts to warm up, the present value between 2 and 9 will be displayed. After the warmup has completed, the ready lamp turns on and copy becomes enabled. ③ Make a normal (x1.0) copy on an A4 (8½" x 11") paper. ④ Compare the size of the scale image on the copy with the actual scale size and obtain the vertical magnification ratio using the following formula. Vertical direction magnification ratio compensation rate [%] = $\frac{\text{(size of original)} - \text{(size of scale on the copy)}}{\text{(size of original)}} \times 100$ ⑤ Use the following formula to obtain the vertical magnification ratio preset value. Vertical magnification ratio preset value = previous value (the number shown in (2) above) + vertical magnification ratio compensation rate x 10 ⑥ Program the preset value. [ ] → [PSW] When the preset value is changed by "1", the magnification ratio changed 0.1%. ⑦ Make a normal (x1.0) copy and compare the scale image with the scale size. ⑧ Adjustment will be satisfactory if the size of the scale image on the copy is within ±0.8% with respect to the actual size of the scale. If not, repeat the above procedures ③ thru ⑦ to adjust it once again. If the input number was smaller than "2" or larger than "9", it may not enable to correct the magnification ratio with this test command. In such event, move the slit plate on the lens base towards the paper entry side if smaller than "2", or, move it towards the paper exit side if larger than "9". Then, do the adjustment all over again. ⑨ Terminate the test command 48. CLEAR
49 (SF-7370 only)	Horizontal direction (towards paper transport direction) magnification ratio adjusting test command The horizontal (paper transport direction) magnification ratio can be adjusted by varying the mirror base scan speed. (SF-7370 only) (Adjusting method) ① Place the scale over the original table along the paper moving direction. ② Execute test command 49. [CLEAR] → [0/0] → [0/0] → [CLEAR] → [4] → [9] → [PSW] ([C]) ([C]) At the same moment, the machine starts to warm up, the presently programmed number between 1 and 99 will come displayed. The ready lamp comes active after the warmup has completed and it becomes ready to make copy. ③ Make a normal (x1.0) copy on the A4 (8½" x 11") paper. ④ Compare the size of the scale image on the copy with the actual scale size and obtain the horizontal magnification ratio using the following formula. Horizontal direction magnification ratio compensation rate [%] = $\frac{\text{(size of original)} - \text{(size of scale on the copy)}}{\text{(size of original)}} \times 100$ ⑤ Use the following formula to obtain the Horizontal magnification ratio preset value. Horizontal magnification ratio preset value = previous value (the number shown in ② above) + horizontal magnification ratio compensation rate x 10 ⑥ Program the preset value. [ ] → [ ] → PSW When the preset value is changed by "1", the magnification ratio will be changed 0.1%. ⑦ Make a normal (x1.0) copy and compare the scale image with the scale size. ⑧ Adjustment will be satisfactory if the size of the scale image on the copy is within ±0.8% with respect to the actual size of the scale. If not, repeat the above procedures ③ thru ⑦ to adjust it once again.

Test command	Function
	⑨ Terminate the test command 49. CLEAR
50	Copy lead edge image position adjusting test command Adjustment is done by changing the RRS on timing so that the image of the original may be copied onto appropriate location of the copy paper. Before starting the test command 50, be sure to check the horizontal magnification ratio if appropriate. If not, do the test command 49 to adjust the magnification ratio. There are some differences in the adjustment procedures between the SF-7320 and the SF-7370. (Adjusting method) (SF-7320) ① Place the scale over the original table along the paper moving direction. ② Execute test command 50. [CLEAR] → [0/0] → [0/0] → [CLEAR] → [5] → [0/0] → [PSW] ([C]) ([C]) At the same moment the machine starts to warm up, the presently programmed number between 0 and 99 will be displayed. Description of RRS-a: After completion of the warmup, the ready lamp will come active and become ready to make a copy. ③ Program the RRS-a to "0". [0/0] → [0/0] ④ Press the print switch and make a copy. ⑤ Measure the distance between the lead edge of the paper and the lead edge of the image on the copy. ⑥ Obtain the value of RRS-a. If the value measured in ⑤ is assumed to be L1; RRS-a = 2.778 x L1 + 6.944 Unit in mm, rounded. ⑦ Enter the value of RRS-a obtained in ⑥. [ ] → [ ] ⑧ Make a copy and make sure that the lead edge image loss is within the limits of −2.5±1.5mm. If not, change the value of RRS-a and do adjustment so that it may be within the limits. ⑨ Terminate the test command 50. CLEAR (SF-7370) ① Place the scale over the original table along the paper moving direction. ② Execute test command 50. [CLEAR] → [0/0] → [0/0] → [CLEAR] → [5] → [0/0] → [PSW] ([C]) ([C]) At the same moment the machine starts to warm up, the presently programmed number between 0 and 99 will be displayed. Description of RRS-a: After completion of the warmup, the ready lamp will come active and become ready to make a copy. ③ Program the RRS-a to "0". [0/0] → [0/0] ④ Turn the paper select key on. The cassette lamp turned active changes to blink and the presently programmed number between 0 and 99 will be displayed. Description of RRS-b ⑤ Program the RRS-b to "0". [0/0] → [0/0] ⑥ Make one each of copy in the normal (x1.0) and reduction mode (x0.64), and measure the distance between the copy lead edge and the scale image lead edge. ⑦ Obtain values for RRS-a and RRS-b. L1 = distance between the copy paper lead edge and the scale image lead edge in the normal (x1.0) mode. L2 = distance between the copy paper lead edge and the scale image lead edge in the reduction (x0.64) mode. Substitute the values of L1 and L2 into the following formulate to obtain RRS-a and RRS-b. RRS-a = 7.716 x (L1 − L2) RRS-b = ((11.574 x L2) − (7.407 x L1)) + 60.417 Unit in mm, rounded. ⑧ Turn the paper select key on. The blinking cassette lamp changes to permanent on. ⑨ Program the value of RRS-a that obtained in ⑦. [ ] → [ ] ⑩ Program the value of RRS-b that obtained in ⑦. Paper select key (cassette lamp on $ blink) [ ] → [ ] ⑪ Make a copy in the normal (x1.0) mode and make sure that the lead edge image loss is within −2.5±1.5mm. If not, change the value of RRS-b and do adjustment so that it may be within the limits. ⑫ Terminate the test command 50. CLEAR

st command	Function
58	Copy lead edge void area adjusting test command The void area width at the copy lead edge is adjusted by varying the GRID on timing. This test command must be executed after the copy lead edge location has been completed using the test command 50. (Adjusting method) ① Place the scale and a blank paper on the original table.  ② Execute test command 58. CLEAR → 0/0 → 0/0 → CLEAR → 5 → 8 → PSW (C) (C) At the same moment the machine starts to warm up, the presently programmed number between 1 and 99 will be displayed. The ready lamp comes active after the warmup has completed and becomes ready to make a copy. ③ Make a normal (x1.0) copy with the original cover left open. ④ Enter a number and make adjustment. Increasing the number makes the void area wider and vice versa. By changing the number by "1" will change the void area by about 0.12mm. ⑤ Terminate the test command 58. CLEAR
72	Copy kit programming test command (Programming method) ① Execute test command 72. CLEAR → 0/0 → 0/0 → CLEAR → 7 → 2 → PSW (C) (C) At the same moment the ready lamp comes active, the presently programmed number between 1 and 4 will be displayed. ② Enter a number to select the copy kit out of the table below. [ ] → PSW With this, the number is stored in the memory and the ready lamp turns off.

Parameter	Developer lamp DML active after		Maintenance lamp DRL active after	
	Black	Color	Mini-maintenance	Normal maintenance
1	30000 copies	5000 copies	10000 copies	30000 copies
2	30000 copies	5000 copies	15000 copies	30000 copies
3	30000 copies	5000 copies	30000 copies	30000 copies
4	Does not turn on	5000 copies	Does not turn on	Does not turn on

	③ Terminate the test command 72. CLEAR CLEAR
79	Programming model and destination (Programming method) ① Execute test command 79. CLEAR → 0/0 → 0/0 → CLEAR → 7 → 9 → PSW (C) (C) At the same time the ready lamp turns active, the presently programmed number will be displayed. ② Select and enter a number appropriate to the model and destination from the table below. [ ] → PSW Press the print switch to store the number in the memory. The ready lamp turns off.

	SUK	AB series except SUK	SEC	Inch series except SEC	Indonesia
SF-7320	1	5	6	7	25
SF-7370	11	15	16	17	35

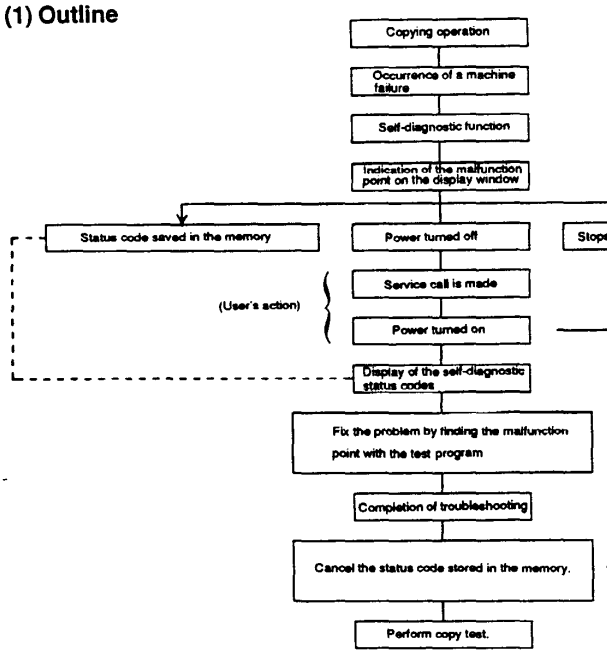
	③ Terminate the test command 79. CLEAR CLEAR

<table>
<tr><th>Test command</th><th>Function</th></tr>
<tr><td>90</td><td>Used to program the drum cleaning mode. (Main motor reverse rotation period programming after the completion of copy operation)
After the test command has executed, "10" will be displayed for the 10-second mode or "60" for the 60-second mode. Press the paper select key to change it from 10 to 60 then to 10 again, which will be displayed in the multicopy window. To select the mode, press the print switch.</td></tr>
<tr><td>91</td><td>Used to program the warmup mode. (Main motor rotation mode programming during the heat roller warmup)
After the test command has executed, the presently programmed warmup mode is displayed in the multicopy window in terms of a number.
Select the mode number to be used using the 1,0 key and press the print switch to set the mode.
<table>
<tr><th>Number</th><th>Warmup mode</th></tr>
<tr><td>0</td><td>Normal mode</td></tr>
<tr><td>1</td><td>Main motor rotations before the heater warmup terminates.</td></tr>
</table></td></tr>
<tr><td>96</td><td>Used for setting the fusing temperature. 155 - 195
When this command is executed, the lower two digits of the currently set fusing temperature are displayed. (Example: "75" means 175 degrees Centigrade.)
Under this state, push the paper select key, and the fusing temperature will be changed by 5 degrees. Repeat pushing until the desired temperature is obtained.</td></tr>
<tr><td>97</td><td>Used to select whether the manual copy mode is started automatically or by pushing the PSW.
Method:
1) When this test command is executed, the currently stored manual copy mode parameter (see table below) is displayed and the ready lamp turns on.
2) After the ready lamp turns on, enter the parameter using a figure 0 or 1 for the mode to be set. Depress the PSW and the parameter is then stored in the memory and the ready lamp goes out.
<table>
<tr><th>Parameter</th><th>Manual copy mode</th></tr>
<tr><td>0</td><td>Auto start mode</td></tr>
<tr><td>1</td><td>PSW start mode</td></tr>
</table>
* Invalid when the multi-bypass stacker is installed. (Copy starts after depression of the PSW, when the multi-bypass stacker is installed.)</td></tr>
<tr><td>98</td><td>Used for setting the fusing temperature in the power saving mode.
When this command is executed, the lower two digits of the currently set fusing temperature in the power saving mode are displayed.
Under this state, push the paper select key, and the fusing temperature will be changed by 5 degrees. Repeat pushing until the desired temperature is obtained.
150 — 165</td></tr>
</table>

4. Self-diagnostic functions

When the copier malfunctions, operations are suspended immediately and a status code is indicated on the multicopy number display. Status codes are represented as an alphanumeric combination of figures.

(1) Outline


Copying operation
Occurrence of a machine failure
Self-diagnostic function
Indication of the malfunction point on the display window
Status code saved in the memory
Power turned off
Stops the machine operation
(User's action)
Service call is made
Power turned on
Display of the self-diagnostic status codes
Fix the problem by finding the malfunction point with the test program
Completion of troubleshooting
Cancel the status code stored in the memory.
Perform copy test.

→ Service technician should make the service call with necessary service parts on the basis of the trouble status reported by the user.

→ ① When one of the test status codes L1, L3, L5, H2, or H4 is indicated, it may be cleared by turning the power off.

② When status U1 is indicated, it may be cleared by test command 13.

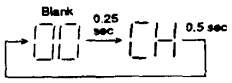
③ When status code CH or PC is indicated, it may be cleared automatically upon completion of troubleshooting, without entering a test command.

④ When status code H3 is indicated, it may be cleared by test command 14.

(2) Status code

Status codes will be displayed on the copy number display window in the manner shown.

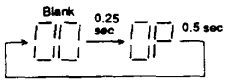
① CH, L1, L3, L5, H2, H3, H4, U1, U2, U3, EE



② PC, P (Turn on), EL, EU

Always displayed as:

③ P (Turn on and off)



Status	Trouble symptom
L1	Mirror base feed trouble • If the mirror home position sensor (MHPS) did not turn off within one second after the start of the mirror. • If the mirror base forward movement was not completed within ten seconds after the start of the mirror base. • If the mirror base was not on the MHPS position when the mirror base started to move forward during copying.
L3	Mirror base return trouble • If the MHPS did not turn on within six seconds after the mirror base started to return.
L5	Magnification rated trouble (lens, No.4/5 mirror) • If it did not move to the given location within fifteen seconds after the lens motor started to operate.
H2	Open heat roller thermistor
H3	Heat roller irregularly high temperature
H4	Heat roller irregularly low temperature • If the heat roller temperature did not reach the prescribed temperature within the given time after the start of the heat roller warmup operation. • If an irregularly low temperature was met after reaching the prescribed temperature.
U1	Low memory backup battery voltage
U2	Backup memory counter sumcheck error
U3	AE sensor trouble • If the AE sensor output voltage did not change in regard to the copy lamp voltage in test command 47.
EE	TCS (Toner control sensor) input trouble • The TCS level was obtained and stored in the RAM by the test command 25, but the value obtained is out of the limits.
EU	If the TCS input voltage by test command 25 is above the limit.
EL	If the TCS input voltage by test command 25 is under the limit.
CH	DV unit not installed or poor connector insertion.
PC	Personal counter not installed for the machine programmed for the personal counter.
P (blink)	During the time cassette feed or multi-bypass stacker is used, if the PPD (paper entry sensor) failed to turn on (paper empty or misfeed) within the given time after the paper feed solenoid (CPFS, MPFS) have turned on.
P	If the cassette was not installed on its given location.